Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~A method for simulating~~ A computer program product embodied on a computer-readable medium to facilitate: ~~comprising the steps of~~:

Selecting from a set of infrastructure systems a subset comprising a plurality of [[an]] interdependent infrastructure systems;

equivalencing the subset;

creating a plurality of agents to interact with the subset; and

simulating multi-scale agent interactions.

2. (Currently Amended) The ~~method~~ product of claim 1, wherein the subset is being selected to represent a geographic region.

3. (Currently Amended) The ~~method~~ product of claim 1, further comprising the steps of:

Selecting components for two way analysis, and wherein the simulation occurs across concurrent time.

4. (Currently Amended) The ~~method~~ product of claim 1, further comprising the steps of

selecting a plurality of infrastructures to simulate; and

connecting the infrastructures, including the steps of

screening candidate interconnections; and

assigning candidates a likelihood of connection.

5. (Currently Amended) The ~~method~~ product of claim 1, wherein the equivalencing step includes the steps of:

identifying connections extending outside of the subset; and

calculating flow limit for each connection extending outside the subset.

6. (Currently Amended) The ~~method~~ product of claim 1, wherein the creating agents step includes the steps of:

creating agents from templates and data for an infrastructure; and

creating agents at equivalenced connections.

7. (Currently Amended) The ~~method~~ product of claim 1, wherein the creating agents step includes the steps of:

creating agent conditions through time;

re-equivalencing the infrastructure; and

continuing the simulation until a steady state is achieved.

8. (Original) An apparatus for simulating interdependent infrastructures, comprising:
a selector for selecting a subset of an interdependent infrastructure system;
an equivalencer for equivalencing a subset;
a plurality of agents for modeling the subset; and
a simulator for simulating multi-scale agent interactions within the subset.

9. (Original) The apparatus of claim 8, wherein the selector comprises a candidate screener for determining the likelihood of interconnections.

10. (Original) The apparatus of claim 8, wherein the equivalencer comprises a flow limit calculator for equivalencing connections extending outside a subset.

11. (Original) The apparatus of claim 8, wherein the agents comprise:

a data gatherer for creating agents; and

templates for creating agents.

12. (Original) The apparatus of claim 8, wherein the simulator comprises a time advancer for advancing agent conditions through time.

13-15. (Canceled)